

AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions and listings of claims in the application:

LISTING OF CLAIMS:

Claims 1-7 (canceled).

8. (previously presented): Method for controlling a DC power source unit used as a power source of an electrically powered tool, the tool having a chargeable battery pack used as an alternative power source of the tool and a power switch, the method comprising steps of:

supplying a DC voltage from said DC power source to said tool when said power switch is turned on,

supplying said DC voltage from said DC power source to said chargeable battery pack to charge said battery pack, when said power switch is turned off, and

detecting a battery condition as to whether or not the battery pack has been fully charged,

wherein said detection continues regardless of whether said battery pack is being currently charged or charging of said battery pack is being interrupted.

9. (previously presented): Method for controlling a DC power source unit used as a power source of an electrically powered tool, the tool having a chargeable battery pack used as an alternative power source of the tool and a power switch, the method comprising steps of:

supplying a DC voltage from said DC power source to said tool when said power switch is turned on,

supplying said DC voltage from said DC power source to said chargeable battery pack to charge said battery pack, when said power switch is turned off, and

detecting a signal indicative of the temperature of said battery pack to determine whether or not the battery pack has been fully charged,

wherein said detection continues regardless of whether said battery pack is being currently charged or charging of said battery pack is being interrupted.

10. (previously presented): Method as defined in claim 8, which further comprises steps of:

measuring a time period during which the power switch is continuously held in off state and,

charging said battery pack when said measured time period exceeds a predetermined period of time.

11. (previously presented): Method as defined in claim 9, which further comprises steps of:

measuring a time period during which the power switch is continuously held in off state and,

charging said battery pack when said measured time period exceeds a predetermined period of time.

12. (previously presented): An electrically powered tool having a chargeable battery pack and a power switch, said tool being adapted for use with a DC power source unit as an alternative power source, said DC power source unit comprising:

a switch circuit for switching between supplying the DC power to the tool and supplying DC power to the battery pack for charging the battery pack;

a battery condition detecting means for detecting a condition of the battery pack and outputting a condition signal indicative of the condition of the battery pack;

controller that receives the condition signal from the battery condition detecting means and determines that the battery pack is fully charged when the condition signal has reached a predetermined value,

wherein the controller receives the condition signal from the battery condition detecting means and determines that the battery pack is fully charged regardless of whether the charging means is supplied with the DC power.

13. (previously presented): An electrically powered tool adapted for use with a DC power source unit as defined in claim 12,

wherein battery condition detecting means comprises battery temperature detecting means for detecting a temperature of the battery pack, the condition signal output from the battery temperature detecting means being indicative of the temperature of the battery pack.

14. (previously presented): An electrically powered tool adapted for use with a DC power source unit as defined in claim 12, in which said DC power source unit further comprises:

measuring means for measuring a non-use period of time during which time the tool is continuously held in a non-use condition, wherein the controller outputs a charge enabling signal to the power output switch circuit when the non-use period of time exceeds a predetermined period of time to allow the charging means to resume charging the battery pack.

15. (previously presented): An electrically powered tool adapted for use with a DC power source unit as defined in claim 12, in which said DC power source unit further comprises:

load current detecting means for detecting a load current flowing in the tool,
wherein the controller determines that the tool is in the non-use condition when the load current detecting means does not detect the load current.

16. (currently amended): Method for controlling a DC power source unit used as a power source of an electrically powered tool, the tool having a chargeable battery pack used as an alternative power source of the tool and a power switch, the method comprising steps of:

supplying a DC voltage from said DC power source to said tool when said power switch is turned on,

detecting a battery condition as to whether or not the battery pack has been fully charged, wherein said detection continues regardless of whether said power switch is turned on or is turned off,

measuring a period of time during which said switch is continuously held in an off state, and

supplying said DC voltage from said DC power source to said chargeable battery pack to charge said battery pack, when said measured time period exceeds a predetermined period of time.